SW550M-144

Monocrystalline 144 Cells 530W-550W

Mono Solar Panel Features

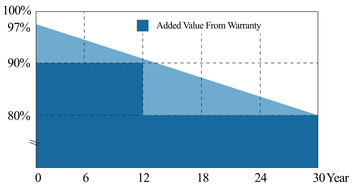
- Widely using of the most popular and mature type of modules for solar system
- High power output and highest conversion efficiency of 21.30%
- Anti-reflective and anti-soiling surface reduces power loss from dirt and dust
- Outstanding Performance in low-light irradiance environments
- Excellent mechanical load resistance: Certified to withstand high wind loads (2400Pa) and Snow loads (5400Pa)
- Positive power tolerance: 0~+5W

Warranty

- 12 years for product defects in materials & workmanship
- 12 years for 90% of warranted minimum power output
- 30 years for 80% of warranted minimum power output
- 30 years liner warranty

Reliable Quality

- Positive power tolerance: 0~+5W
- 100% EL Double-inspection ensures modules are defects free
- Modules Binned by Current to improve system performance
- Potential induced Degradation (PID) Resistant



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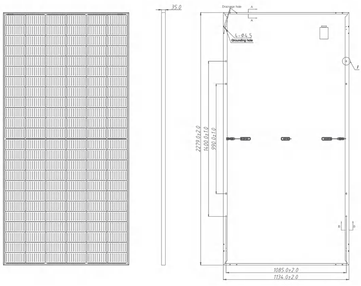
Mechanical parameters

Cell(mm)	Mono 182*91mm
Weight(kg)	29kg
Glass Thickness	3.2mm AR Coating Tempered Glass
Dimensions (L*W*H)(mm)	2279*1134*35mm
Cable Cross Section Size (mm²)	4
Cable Cross Section Length (mm)	300
No.of Cells and Connections	144(6*24)
Junction Box	IP68
Connector	MC4 Compatiple

Working Conditions

Maximum System Voltage	DC 1000V/1500V(IEC)
Operating Temperature	-40℃~+85℃
Maximum Series Fuse	25A
Maximum Static Load,Front (e.g.,snow and wind)	5400Pa (112 lb/ft²)
Maximum Static Load,Back (e.g.,wind)	2400Pa (50 lb/ft²)
NOCT	45±2℃
Positive power tolerance	0~+5W
Application Class	Class A

Engineering Drawings



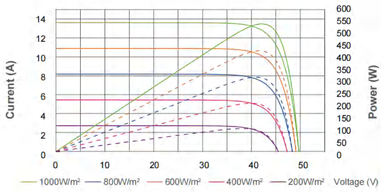
Packaging Configuration

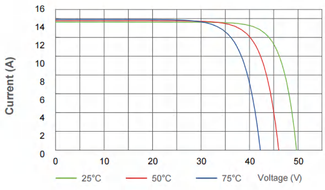
Moduels Per Pallet	31Pcs
Moduels Per 40HQ	620Pcs

Electrical Parameters

Module	SW530M-144 ~ SW550M-144				
Encapsulation	Class/Eva/Cell/Eva/Backsheet				
Maximum Power Pmax (W)	530	535	540	545	550
Maximum Power Voltage (Vmp/V)	41.70	41.80	41.90	42.00	42.10
Maximum Power Current (Imp/A)	12.71	12.80	12.89	12.98	13.07
Open Circuit Voltage (Voc/V)	49.50	49.60	49.70	49.80	49.90
Short Circuit Current (Isc/A)	13.44	13.53	13.62	13.71	13.80
Module Efficiency (%)	20.50	20.70	20.90	21.10	21.30
Power Tolerance (W)	0～+5W				
Temperature Coefficient of Isc (αIsc)	+0.043%/℃				
Temperature Coefficient of Voc (βVoc)	-0.26%/℃				
Temperature Coefficient of Pmax (γPmp)	-0.36%/℃				
STC	Irradiance 1000W/㎡, Cell Temperature 25℃, Air Mass 1.5				

I-V Curve





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